

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO).	FILING DATE .	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/732,949 12/11/2003		12/11/2003	Tieyu Zheng	884.G25US1	9235	
21186	7590	10/04/2006	EXAMINER			
		UNDBERG, WO	DANG, PHUC T			
P.O. BOX MINNEAI		N 55402		ART UNIT	PAPER NUMBER	
				2818		
				DATE MAILED: 10/04/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.		Applicant(s)					
0.55	• 44	10/732,949		ZHENG ET AL.					
Office	Action Summary	Examiner		Art Unit					
		PHUC T. DANG		2818					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status	,								
1) Responsive	Responsive to communication(s) filed on <u>RCE filed August 16, 2006</u> .								
2a) ☐ This action	This action is FINAL . 2b)⊠ This action is non-final.								
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
4a) Of the a 5)⊠ Claim(s) <u>1</u> 6)⊠ Claim(s) <u>5</u> 7)⊠ Claim(s) <u>6</u>	Claim(s) 1-11 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) 1-4 and 7-11 is/are allowed. Claim(s) 5 is/are rejected. Claim(s) 6 is/are objected to. Claim(s) are subject to restriction and/or election requirement.								
Application Papers									
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 11 December 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 									
Priority under 35 U.	S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.									
	es Cited (PTO-892) son's Patent Drawing Review (PTO-948) ure Statement(s) (PTO-1449 or PTO/SB/08)	5) <u> </u>			O-152)				
Paper No(s)/Mail Date 6) Other:									

Application/Control Number: 10/732,949

Art Unit: 2818

DETAILED ACTION

Page 2

Request for Continued Examination (RCE)

1. Request for Continued Examination (RCE) filed on August 16, 2006 has been acknowledged and considered.

Claims 1-11 are currently pending in the application.

Oath/Declaration

2. The oath/declaration filed on December 11, 2003 is acceptable.

Claim Objections

3. Claims 5-6 are objected to because of the following reason:

In claim 5, line 3, and in claim 6, line 4, "a metal" should be -- the metal --. Correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rabinovich (U.S. Patent No. 5,758,816).

Art Unit: 2818

Regarding claim 5, The embodiment of Figs. 1-2 of Rabinovich discloses a method for attaching small components to each other comprising:

placing a solder perform 20 between a first metallic layer 14 and an insulative (ceramic) base 12 (see Figs. 1-2 and col. 2, line 33-col. 3, line 36).

The embodiment of Figs. 1-2 of Rabinovich disclose the features of the claimed invention discussed above, but does not disclose a step of applying a current to the solder perform until the solder perform melts to seal the metal cover to the insulating base.

However, in the embodiment of Fig. 10, Rabinovic discloses a step of applying a current to the graphite heater 200, then heating the solder perform 20 (see Fig. 10 and col. 6, lines 20-46).

Applying an electric current to the heater, the heating the solder perform will be obviously melted and seal the first metallic layer 14 and the insulative base 12 with the lens 10 as shown in Figs. 1-2.

Therefore, claim 5 is obviously rendered over Rabinovic.

Allowable Subject Matter

5. Claim 1-4 and 6-11 would be allowed.

The following is a statement of reason for the indication of allowable subject matter:

Claim 1-4 and 6-11 is considered allowable since the prior art of record and the considered pertinent to the applicant's disclosure does not teach or suggest the claimed invention having a step of applying a current to the solder perform until the solder melts to seal the metal cover to

Art Unit: 2818

the insulating base, wherein the current is applied through conductive vias running through the insulating base.

Claim 6 would be allowable if rewritten or amended to overcome the objection set forth in this Office action.

Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (6,040,624, 4,905,275, 4,142,286, US 2004/0114882 A1) are as interested.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuc T. Dang whose telephone number is 571-272-1776. The examiner can normally be reached on 8:00 am-5:00 pm.
- 8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harvey O Minsun can be reached on (571) 272-1835. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and Final communications.
- 9. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Lang hu

Phuc T. Dang

Primary Examiner

Art Unit 2818